



Roles and Responsibilities of OCT and STMD

NAC Technology, Innovation and Engineering Subcommittee

David W. Miller
NASA Chief Technologist

July 26, 2016

Updates

- Current Chief Technologist term ends on 31-August-2016
 - Search for new Chief Technologist to be conducted by next NASA Administrator
- Search for new Deputy Chief Technologist currently underway
 - Selection likely in July or August, 2016
- Recently held inter-Agency Technical Interchange Meeting
 - Sensor Miniaturization for Small Satellites
 - Part of the Space Partnership S&T Forum
- Technology Transfer "Spinoff 2017" report completed

EC Motivation and Status Quo

- Better align functions with roles and responsibilities in both OCT and STMD leading to improved efficiency and effectiveness
- Criteria
 - Strategic technology activities in OCT: policy and guidance
 - Operational technology activities in STMD: program management and execution
- OCT roles and responsibilities that are unchanged
 - CCT's funding and CTC primary reporting
 - Strategic Technology Investment Plan (STIP) leadership
 - Annual Portfolio Analysis
 - Space Partnership S&T Forum and TIM's
 - External engagement and advocacy
 - Lead advisor to Administrator on technology policy and strategy
 - ISS Utilization Advocacy Board co-leadership (with OCS)
- STMD roles and responsibilities that are unchanged
 - Economic Regional Development
 - All space technology research management activities

Changes

- a. Streamline Technology Roadmap Process and NRC Assessment
 - Use STIP to communicate strategy internal and external to NASA
- b. OCT/STMD to more effectively utilize existing NAC TI&E advisory capability to review the Agency technology portfolio
- c. Re-charter NTEC with support from Agency Council Staff
- d. Move management of Emerging Space Grants to STMD
- e. Conduct independent assessment of Centennial Challenges Program to improve alignment with Agency goals and objectives
- f. Conduct independent assessment of TechPort
- g. Implementation of the NASA Innovation Framework will be the responsibility of OCT under the direction of the Deputy Administrator
 - This decision does not reflect a change in OCT or STMD operations
- h. Move Technology Transfer and Prizes & Challenges to STMD
 - Maintain strategic nature of P&C distinct from Centennial Challenges
- Move TechPort management to STMD for cross-agency data gathering, archiving and reporting

Options for NAC TI&E Advisory Role

- Status quo
- Provide biennial independent assessment of the STIP
- Coordinate with Aeronautics sub-committee for reviews
 - Particularly for cross-cutting technologies (e.g., autonomy, structures, hypersonics)
- Merge with Aeronautics sub-committee
- Increase membership to provide more breadth of expertise
- Conduct in-depth studies of technology readiness for specific missions
 - E.g., ECLSS for long duration habitation in cis-lunar space
- Conduct annual in-depth review of select technology areas
 - Evaluate progress versus need, alignment with Agency strategic goals, relationship to work being conducted elsewhere

Discussion